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## ABSTRACT

A cloze informal reading inventory (CIRI) was constructed from a basal reading series and administered to all 120 second through sixth grade students at a university laboratory school to determine if CIRI was as effective as a traditional informal reading inventory (IRI). All students scoring below second and above eighth grade on the IRI were excluded from the study, resulting in a sample of 68 students with average WISC scores of 115 to 120. No differences were found between mean scores for the IRI and CIRI. Age was positively correlated with scores on the IRI and the CIRI; current reading placement by teachers was significantly correlated to both the IRI and the CIRI; and intelligence was significantly correlated with reading achievement, IRI scores, and CIRI scores. Reading achievement as measured by a standardized test was significantly correlated with both IRI and CIRI scores, though both correlations were low. The CIRI appeared to be a much more efficient placement tool in a classroom setting and to be just as accurate as the IRI. (RL)

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Since the inception of the cloze procedure by Taylor in 1953, numerous studies relating to various aspects of this topic have been conducted. However, there is a dearth of research concerning the use of cloze as a placement tool for reading instruction.

An informal reading inventory has been accepted in academic circles as a useful instrument for determining placement in instructional materials; its individualized nature and the teacher time involved in administration often preclude its applicability in situations involving high student ratio per teacher. This research investigated the feasibility of using the results obtained when cloze passages were administered in group settings as indicators of placement in instructional reading materials.

Purpose

The major purposes of this study were to determine if a group cloze informal reading inventory (CIRI) could be utilized as effectively as a traditional informal reading inventory (IRI) to place students in instructional level materials, and if its utilization as a placement instrument was affected when the variables of reading achievement, current reading placement, age, and intelligence were considered.

Further, this study analyzed the types of responses made using

Bormuth's seven categories (1965)--exact responses; synonyms, grammatically correct; synonyms, grammatically incorrect; unrelated semantically, grammatically correct; unrelated semantically, grammatically incorrect; unclassifiable; and no response--to determine if response types were related to reading achievement, current reading placement, age, intelligence, and scores on the IRI and CIRI.

### Sample

All 120 students in the Western Kentucky University laboratory school, grades two through six, participated in the study. First graders were not included because there is some indication (Ransom, 1965) that the cloze procedure may not be an adequate placement tool at this reading level.

### Methodology

A cloze informal reading inventory (CIRI) was constructed from a basal reading series. Every fifth word was deleted. Readability formulas were used to determine reading levels. Identifying information and current grade level placement in reading materials were supplied by the laboratory school faculty. The IRI, the California Achievement Test, and the Wechsler Intelligence Scale for Children were administered to all subjects. The cloze instruments were administered as group tests; initial testing level was determined by teacher judgment of the subject's instructional reading level.

### Descriptive Statistics

Characteristics of the sample are provided in Table 1.

Table 1  
Descriptive Statistics

| <u>Sample</u> | <u>Age</u>                     | <u>Grade Level</u> | <u>WISC Scores</u>                        |
|---------------|--------------------------------|--------------------|-------------------------------------------|
| Female 33     | $\bar{M}$ = 9.8 years          |                    | $\bar{M}$ =115 (school)                   |
| Male 35       | Range = 5 years<br>(ages 7-12) | 2 - 6              | $\bar{M}$ =120 (sample)<br>R =59 (89-148) |
| *Total 68     |                                |                    |                                           |

\*All students scoring below 2nd and above 8th grade on the IRI were not included.

### Results and Conclusions

Using a t test for differences in means, no difference ( $p < .05$ ) was found between mean scores for the IRI and CIRI (see Table 2). Therefore, it appears that with this sample the CIRI could be utilized as effectively as the IRI as a placement tool. This is probably the most important finding of the study.

Table 2  
Mean Difference Between IRI and  
CIRI Scores

| No. of<br>Cases | Mean    | St.<br>Dev. | St.<br>Error | Dif. $\bar{M}$ | St.<br>Dev. | St.<br>Error | t<br>Value |
|-----------------|---------|-------------|--------------|----------------|-------------|--------------|------------|
| 68              | 14,1471 | 3,818       | 0.463        | 0.5000         | 4,020       | 0,488        | 1.03       |
|                 | 13,6471 | 6,061       | 0.735        |                |             |              |            |

Relationships between the variables of age, reading placement based on teacher judgment, intelligence, reading achievement, and scores on the IRI and CIRI were analyzed using the Pearson correlational technique ( $p < .05$ ). The analyses yielded the following results (see Table 3):

1. Age and scores on the IRI and CIRI were positively correlated, as would be expected--as age increased, IRI and CIRI scores also increased.
2. Current reading placement as determined by expert teachers was significantly correlated to both the IRI and the CIRI. The correlation for IRI and reading placement (.4799) was higher than the correlation for the CIRI and reading placement (.3949). This result may indicate that the IRI is reflective of conventional teaching methods. Expected student performance--i.e., reading a passage and answering oral questions--is highly similar for both the IRI and traditional classroom procedures.
3. Intelligence was significantly correlated with reading achievement, IRI scores, and CIRI scores. This finding corroborates the results of previous studies relating to intelligence and reading achievement as measured by both standardized achievement tests and informal measures. Further, the significant parallel correlation between intelligence and IRI and CIRI scores attests to the validity of the CIRI as a placement instrument for reading instruction.

4. Reading achievement as measured by a standardized test was significantly correlated with IRI and CIRI scores; however, both correlations were low.

Table 3

Correlations Between the Variables of  
Age, Reading Placement, Intelligence, Reading  
Achievement, IRI, and CIRI

|                    | Age                         | Reading<br>Placmnt          | IQ                          | Reading<br>Achvmnt          | IRI                        | CIRI                        |
|--------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|
| Age                |                             | 0.8522<br>( 68)<br>S=0.001  | -0.1556<br>( 68)<br>S=0.103 | -0.1949<br>( 64)<br>S=0.061 | 0.3311<br>( 68)<br>S=0.003 | 0.2611<br>( 68 )<br>S=0.016 |
| Reading<br>Placmnt | 0.8522<br>( 68)<br>S=0.001  |                             | 0.0487<br>( 68)<br>S=0.347  | -0.1125<br>(64)<br>S=0.188  | 0.4799<br>( 68)<br>S=0.001 | 0.3949<br>(68)<br>S=0.001   |
| IQ                 | -0.1556<br>( 68)<br>S=0.103 | 0.0487<br>( 68)<br>S=0.347  |                             | 0.4550<br>( 64 )<br>S=0.001 | 0.4692<br>( 68)<br>S=0.001 | 0.4182<br>( 68)<br>S=0.001  |
| Reading<br>Achvmnt | -0.1949<br>( 64)<br>S=0.061 | -0.1125<br>( 64)<br>S=0.188 | 0.4550<br>( 64)<br>S=0.001  |                             | 0.2383<br>( 64)<br>S=0.029 | 0.3813<br>( 64)<br>S=0.001  |
| IRI                | 0.3311<br>( 68)<br>S=0.003  | 0.4799<br>( 68)<br>S=0.001  | 0.4692<br>( 68)<br>S=0.001  | 0.2383<br>( 64)<br>S=0.029  |                            | 0.7595<br>( 68)<br>S=0.001  |
| CIRI               | 0.2611<br>( 68)<br>S=0.016  | 0.3949<br>( 68)<br>S=0.001  | 0.4182<br>( 68)<br>S=0.001  | 0.3813<br>( 64)<br>S=0.001  | 0.7595<br>( 68)<br>S=0.001 |                             |

The Pearson correlational technique ( $p < .05$ ) was used to determine relationships among the variables of age, reading placement, intelligence, reading achievement, IRI scores, CIRI scores, and the seven categories of responses made on the CIRI (see Table 4). An examination of the data revealed that all significant correlations were low and negative. The correlations of reading achievement scores, IRI scores, and CIRI scores with number of exact word

Table 4

Correlations Between the Variables Age, Reading Placement,  
Intelligence, Reading Achievement, IRI,  
CIRI and Types of Responses

|                    | Exact<br>Word                 | Synonym<br>Gram Cor | Synonym<br>Gram Incor | Unrel Sem<br>Gram Cor. | Unrel Sem<br>Gram Incor | Unclass            | No<br>Response     |
|--------------------|-------------------------------|---------------------|-----------------------|------------------------|-------------------------|--------------------|--------------------|
| Age                | -0.1337<br>S=0.138            | 0.0306<br>S=0.402   | -0.0131<br>S=0.458    | -0.0907<br>S=0.231     | 0.0510<br>S=0.340       | 0.0421<br>S=0.367  | -0.3299<br>S=0.003 |
| Reading<br>Placmnt | -0.1849<br>S=0.066<br>S=0.066 | 0.0148<br>S=0.452   | -0.0368<br>S=0.383    | -0.1621<br>S=0.093     | -0.0892<br>S=0.235      | 0.0655<br>S=0.298  | -0.3211<br>S=0.004 |
| IQ                 | -0.1394<br>S=0.128            | -0.0703<br>S=0.284  | -0.1023<br>S=0.203    | -0.0594<br>S=0.315     | -0.3642<br>S=0.001      | 0.1097<br>S=0.187  | 0.0881<br>S=0.238  |
| Reading<br>Achvmt  | -0.2189<br>S=0.041            | -0.1581<br>S=0.106  | -0.2669<br>S=0.017    | -0.1141<br>S=0.185     | -0.3190<br>S=0.005      | -0.1976<br>S=0.059 | 0.0284<br>S=0.412  |
| IRI                | -0.3697<br>S=0.001            | -0.0932<br>S=0.225  | 0.0264<br>S=0.415     | -0.2459<br>S=0.022     | -0.2629<br>S=0.015      | 0.0201<br>S=0.435  | -0.0717<br>S=0.281 |
| CIRI               | -0.4003<br>S=0.001            | -0.1823<br>S=0.068  | -0.0607<br>S=0.311    | -0.1654<br>S=0.089     | -0.1918<br>S=0.059      | -0.0025<br>S=0.492 | -0.1270<br>S=0.151 |

responses were highly similar; since CIRI placement level was based on the exact word response, it appears that the IRI and the CIRI measured similar functions.

Perusal of the raw data revealed that 42 of the 68 respondents completed every item on the CIRI. Of the remaining 26 ss, most omitted fewer than four responses. Four ss omitted 20 or more responses; for these ss the CIRI probably was not meaningful. Therefore, it appears these categories can be effectively utilized in further cloze research.

Questions raised by this investigation include the following:

1. Does the low significant correlation between the IRI, CIRI, and age tend to indicate that the CIRI is as effective at one age level as another in placing students for reading instruction?

2. Is the CIRI effective as a placement tool for reading instruction for ss who score in the below average range of intelligence?

As a result of this research and that of previous researchers, the CIRI appears to be as accurate in placement for instructional level as the IRI; as is obvious by the group procedures used to administer the CIRI, it is a much more efficient placement tool in a classroom setting. Further research directed toward the questions raised by this investigation should assist practitioners in making judgments regarding its utilization.

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